

Quadro[®]4L



Quadro4L: Small Office IP PBX with Four FXO and Two FXS Ports

Any business with communication needs requires a phone system with the same reliability and clarity of a large enterprise product. The Quadro4L was designed with those requirements as primary attributes and is the main focus of all Epygi solutions. No matter the size of the customer, a company needs a telephony product that will provide a premium level of service every day on every call. In addition to superb quality, the Quadro4L offers a wide range of features including unified messaging, auto attendant, call relay, call queuing, integrated fax server, life line port and key system emulation.

The Quadro4L is equipped with four (4) FXO ports to connect to the PSTN and two (2) FXS ports for analog phones or fax machines. Additionally included is SIP trunking, so the Quadro4L can connect directly to an Internet Telephony Service Provider (ITSP) at no additional cost. IP phones can also be registered directly with the IP PBX supporting up to 24 IP phones. These phones can either be manually connected or automatically configured by the Quadro4L. In key system mode, up to 12 IP phones can be used.

Legacy Phone System Replacement

Epygi designed the Quadro4L for deployment right out of the box as a turn-key solution. Using advanced plug-and-play for IP phones, multiple FXO ports for PSTN access and two FXS ports, this IP PBX functions as a traditional PBX or key system. As a bonus, Epygi delivers features not found on traditional key systems. Business enhancements include after-hours auto attendant and unified messaging, among many others.

Effortless Administration

Sophisticated auto-recognition and auto-configuration capabilities between the Quadro4L and certified IP phones simplify installation and operation. The administrator can modify automatic assignments through the Graphical User Interface. Also integrated into the Quadro4L is a fully featured router, DHCP and firewall with intrusion detection and prevention. Therefore, a complete small business network can be managed by a single device.

What are Your VoIP BENEFITS?

- Key System Simplicity
- True IP Solution
- Turn-key Installation
- No Expensive Licenses

Telephony

PBX Features

Call blocking*, Forwarding, Hold, Transfer*
 Call relay*, Call waiting*
 Caller ID Detection, Voice mail*
 Call park*, Pickup*, Paging*, Intercom*
 Multi-level auto attendant with Interactive Voice Response (IVR) and
 VoiceXMLv2 support*
 Voice mail with SMS notification*
 Distinctive ringing*
 Speed dialing*
 Many extension ringing*
 Receptionist
 Call hunting*, Hiding Caller ID*
 Automated Call back from Auto Attendant*
 Hold music
 Call statistics
 Do Not Disturb service*
 Unified messaging*
 3-way conferencing*
 T.38 fax, fax relay and clear channel fax*
 Unified Fax Messaging*
 Busy auto-redial*
 Directory assistance*
 Dial plans (call routing)*
 IP Routing*
 Call Queue*
 Key System Emulation

* Features not available in Key System Emulation Mode

Voice and Video Features

Voice Coding:

G.711, G.726 (16, 24, 32, 40 Kbps),
 G.729A, iLBC (13.33 kbit/s, 15.2 kbit/s);
 VAD, CNG, G.168 echo cancellation
 G.722 pass-through point-to-point HD call

Video Coding:

H.263 and H.264 pass-through point-to-point video call

VoIP Encryption:

SRTP

VoIP Signaling

SIP, SIP/TLS

DTMF

In band & out of band signaling support.

VoIP Data and Signaling Protocols

ITU-T G.711, G.726, G.729 Annex A;
 IETF RFC 3951- iLBC; ITU-T Q.23, Q.24;
 Bellcore GR.506, GR.181; ITU-T G.168-
 2000, 2002; ETS 300659 1,2,3;
 SIP, SIPs/TLS (RFCs: 2246, 3261, 3263,
 3265, 3311, 3323, 3324, 3325, 3428, 3515,
 3578, 3581, 3725, 3842, 3856, 3863, 3891,
 3892, 4028, 4235)
 SDP (RFC: 2327, 4568)
 RTP/RTCP (RFCs: 1889, 1890, 2833, 3389,
 3550, 3551, 3555, 3711, 4733, 3952),
 Fax over IP (ITU-T: T.4, T.30, T.38, V.17, V.21,
 V.27 ter, V.29)

POTS Signaling

Loop start
 FSK and DTMF Caller ID support

Connectivity

Physical interfaces

Premise connections:

2 FXS short-loop FXS ports (RJ-11)
 1 LAN Ethernet 10/100 BASE-T port
 (RJ-45)

Uplink connections:

4 FXO ports to the Central Office (RJ11)
 1 WAN Ethernet 10/100 BASE-T (RJ45)

Phones

IP phones:

16 SIP phones by default in PBX mode
 8 additional SIP phones may be
 added with feature keys in PBX mode
 12 SIP phones can be used in KSE mode
 All SIP phones can be connected both
 from LAN or WAN side
 Plug-and-Play with select IP Phone
 manufactures

Analog phones:

2 Analog phones (or other analog devices)
 to connect via FXS ports

Auto Attendants and Virtual Extensions

Auto Attendants:

Up to 100 standard and custom AA can be
 registered

Virtual Extensions:

Up to 100 Virtual Extensions can be
 registered**

**The total number of extensions used for IP
 phones, Analog phones, AA and virtual
 extensions can not exceed 100 extensions.

System Capacity

Up to 16 simultaneous VoIP calls with
 external parties
 Unlimited station to station calling for
 IP phones
 Unlimited station to station calling for
 analog phones
 4 analog PSTN calls with external parties

System

Management

Multilingual WEB interface accessible from
 LAN and WAN (HTTP/HTTPS)
 Password control
 Remote diagnostics and software upgrade
 Auto-provisioning
 VoIP Carrier Wizard
 Download/restore configuration
 Legible and editable configuration files
 Auto-configuration of IP phones via
 TFTP and HTTP
 SNMP Monitoring and Configuration
 Third Party Call Control XML RPC

Reset button with factory reset option
 Custom Language Pack

Billing

Radius Client (RFCs: 2865, 2866)

Diagnostics/Testing

LEDs: Busy, Info, Fault, LAN, WAN,
 Loop settings
 Remote testing

Internet

STUN/NAT traversal (RFC 3489)

IPSec VPN with DES, 3DES and AES
 encryption in tunnel mode (RFCs:
 2402, 2406, 2409). Automatic IKE
 key support

PPTP VPN

L2TP VPN

Firewall security via:

Intrusion Detection System

NAT (Network Address Translation)

Policy and service-based filtering

Stateful inspection firewall

DHCP server on the LAN side

DHCP client on the WAN side

DNS server with forwarding functionality

SNTP (Simple Network Time Protocol)

server/client for computer clock synchro-

nization PPPoE connection to the ISP

with PAP/(MS)CHAP authentication

IP DIFFSERV for QoS

Virtual LAN (VLAN/IEEE 802.1Q)

Mail client to send voice and fax

messages as e-mail attachments (.wav

and .tif) and system notifications

DNS (DYNDNS) support with third party

NAT/Router with port forwarding and

port translation.

Environmental

Physical Dimensions

Desktop devices, wall-mountable:

Measurements: 7.41" x 6.24" x 1.77"
 (19 x 16 x 4.5 cm)

Weight: 13 ounces (360 g)

Conditions

41°F - 104°F (5°C - 40°C) operating
 temperature

41°F - 140°F (5°C - 60°C) storage
 temperature

5% - 90% non-condensing humidity

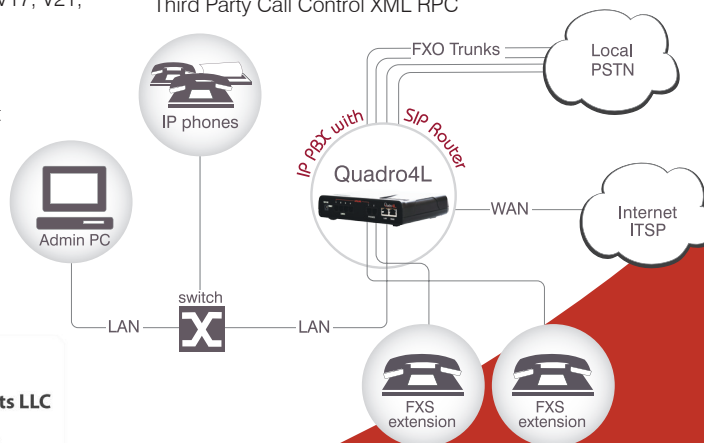
Power Supply

Input 100 - 240 VAC; 50/60 Hz; 0.5 A

Output 12.0 VDC; 1.5 A

Regulatory Compliance

Telecom: CTR21/TBR21, AS/ACIF



888 895 8256

www.alloycp.com
 sales@alloycp.com

Proudly Distributed in the USA by
Alloy Computer Products LLC

1226 Alderwood Ave, Sunnyvale,
 CA, 94089

Phone: 408 740 4016